

Please amend claims 115-121, 145-150, 159-183 and 187-191 as follows:

LISTING OF CLAIMS:

Claim 115 (Currently amended) In a method of transmitting a message ~~through the internet~~ from a sender to ~~an agent for a recipient~~ a destination address through a

5 server displaced from the ~~recipient~~ destination address, the steps at the server of:

receiving the message from the sender,

~~transmitting to the sender the message from the server to the agent of the recipient~~

transmitting the message to the destination address,

10 receiving at the server an indication from the agent destination address that the message has been received at the agent destination address from the server,

providing at the server a digital signature of the message ~~received from the agent~~,

and

transmitting to the sender the message ~~received from the sender~~ and the digital signature of the message for storage by the sender.

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Claim 116 (Currently amended) In a method as set forth in claim 115, the step at the server of:

discarding the message and the digital signature of the message after the transmission of the message and the digital signature of the message to the sender.

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Claim 117 (Currently amended) In a method as set forth in claim 116[[.]] the steps at the server of:

receiving from the sender a copy of the message and the digital signature of the message,

5 generating digital fingerprints of the message and the digital signature received from the sender,

comparing the digital fingerprints, and

authenticating the message on the basis of the results of the comparison.

10 Claim 118 (Currently amended) In a method as set forth in claim 115, the steps at the server of:

providing at the server, at the same time as the provision of the digital signature of the message at the server, an attachment including the identity of the sender and the identity and ~~internet~~ address of the server and the ~~identity and internet~~ destination address
15 ~~of the agent~~, all as received by the server from the ~~agent~~ destination address,

generating a digital signature of the attachment, and

transmitting to the sender the attachment including the identity of the sender, the identity and ~~internet~~ address of the server and the ~~identity and internet~~ destination address
of the ~~agent~~ and the digital signature of the attachment, ~~all as received by the server from~~
20 ~~the agent~~, at the same time as the transmission of the message, and the digital signature of the message, to the sender.

Claim 119 (Currently amended) In a method as set forth in claim 115, the steps at the server of:

receiving an attachment from the ~~agent~~ destination address,

5 providing at the server a digital signature of the attachment,

transmitting to the sender, at the same time as the transmission of the message and the digital signature of the message, the attachment and the digital signature of the attachment.

10 Claim 120 (Currently amended) In a method as set forth in claim 119, the steps at the server of:

receiving from the sender copies of the message and the attachment ~~of the message~~ and the digital signatures of the message and the attachment,

generating digital fingerprints of the message and the digital signature of the message and digital fingerprints of the attachment and the digital signature of the attachment, and

comparing the digital fingerprints of the message and the digital signature of the message[[.]] and comparing the digital fingerprints of the attachment and the digital signature of the attachment[[.]] to authenticate the message and the attachment.

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Claim 121 (Currently amended) In a method as set forth in claim 11 [[9]][[5]], the steps at the server of

~~the attachment constituting a first attachment,~~

~~receiving at the server from the agent, at the same time as the reception of the message and the attachment of the message from the agent, a second attachment including the identity of the sender and the identity and internet address of the server and~~
5 ~~the identity and internet address of the agent, all as received by the server from the agent,~~

~~generating a digital signature of the second attachment, and~~

~~transmitting to the sender the second attachment including the identity of the sender, the identity and internet address of the server, and the identity and internet address of the agent and a digital signature of the second attachment, all as received by~~
10 ~~the server from the agent, at the same time as the transmission to the sender of the message and the first attachment and the digital signatures of the message and of the first attachment to the sender~~

receiving the message and the digital signature of the message at the server from the sender, and

15 authenticating the message at the server on the basis of the message and the digital signature received by the server from the sender.

Claim 145 (Currently amended) A method of transmitting a message ~~through the internet~~ from a sender to ~~an agent~~ a destination address for a recipient through a server
20 ~~displaced from the agent~~ destination address, including the steps at the server of,
receiving the message from the sender,

transmitting the message to the destination address through a path including
servers between the server and the destination address, and

transmitting to the ~~agent~~ sender the message and a ~~return address identifying the
sender and the server~~ [[,]] the path of transmission of the message between the server and
5 the destination address.

~~receiving from the agent the identify of the sender and the server, and
identifying the message transmitted from the server to the agent and the identify of
the sender and the server as received by the server from the recipient~~

10 Claim 146 (Currently amended) A method as set forth in claim 145 237 wherein
~~the server transmits to the sender the message and the identity of the sender and
the recipient and wherein~~

the server receives from the sender the message and the ~~identity of the sender and
the recipient~~ path of transmission of the message between the server and the destination
15 address and wherein

the server authenticates the message on the basis of ~~information transmitted by the
sender to the server after the receipt of the information by the server from the agent~~ the
message and the path of transmission of the message between the server and the
destination address.

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Claim 147 (Currently amended) A method as set forth in claim 146 wherein the server does not retain the message after it transmits the message to the sender.

5 Claim 148 (Currently amended) A method as set forth in claim 145 wherein the ~~recipient~~ destination address is one of a plurality of ~~recipients~~ destination addresses receiving the message from the server ~~and wherein~~ the ~~return address identifies the recipient from among the recipients in the~~ plurality.

10 Claim 149 (Currently amended) A method as set forth in claim 145 wherein the ~~message has an attachment and wherein~~ the path of transmission of the message between the server and the destination address includes the identity and address of the server and a recipient at the destination address ~~return address also identifies the attachment to the message.~~

15 Claim 150 (Currently amended) A method as set forth in claim 146 wherein the server does not retain the message after it transmits the message to the sender and wherein the ~~recipient~~ destination address is one of a plurality of ~~recipients~~ destination
20 addresses receiving the message from the server and wherein the ~~return address identifies the recipient from among the recipients in the plurality~~ and wherein

the message has an attachment and wherein

the ~~return address also identifies the attachment to the message~~ attachment
identifies the path of transmission of the message between the server and the destination
address.

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Claim 159 (Currently amended) A method of providing a delivery at a ~~first~~ server
of an electronic message from the ~~first~~ server to a destination address, including the steps
of:

receiving at the ~~first~~ server an electronic message from a ~~message~~ sender
10 for ~~routing~~ transmission to the destination address,

transmitting the electronic message from the ~~first~~ server to a ~~destination~~
~~server for~~ the destination address via a protocol selected from a group consisting of an
SMTP protocol and an ESMTP protocol, and

~~recording~~ receiving at the ~~first~~ server the ~~transactions~~ transmission of the
15 electronic message between the ~~first~~ server and the destination ~~server in the~~ address via
the selected one of the protocols.

Claim 160. (Currently amended) A method as set forth in claim 159, including
the step[[s]] of:

20 including[[,]] in the ~~transactions~~ transmission between the ~~first~~ server and
the destination ~~server~~ address via the selected one of the protocols, the identity of the

sender, the identity and ~~internet~~ address of the first server and the ~~identity and internet~~
destination address of the ~~destination server~~.

Claim 161. (Currently amended) A method as set forth in claim 159, including

5 the steps of:

providing ~~transactions between~~ a transmission of the message from the first
server ~~and~~ to the sender,

including, in the ~~transactions~~ transmission from ~~between~~ the first server ~~and~~
to the sender, a digital signature of the ~~transmission~~ of the electronic message ~~between~~
10 ~~the first server and the destination server via the selected protocol~~.

Claim 162. (Currently amended) A method as set forth in claim 159, including
the step of:

recording, in the ~~transactions~~ transmission between the first server and the
15 destination ~~server~~ address via the selected one of the protocol[[s]], the time for the
~~sending~~ transmission of the message from the first server to the destination ~~server~~ address
and the time for the receipt of the message by at the destination ~~server~~ address.

Claim 163. (Currently amended) A method as set forth in claim 160, including

20 the steps of:

~~providing transactions between the first server and the sender, and~~

including, in the transmission of the message between the ~~first~~ server and the sender[[,]] a digital signature of the transmission of the electronic message between the ~~first~~ server and the destination ~~server~~ address via the selected one of the protocol[[s]], and recording, in the ~~transactions~~ transmission between the ~~first~~ server and the destination ~~server~~ address via the selected one of the protocol[[s,]] the time for the sending transmission of the message from the ~~first~~ server to the destination ~~server~~ address and the time for the receipt of the message ~~by~~ at the destination ~~server~~ address.

Claim 164 (Currently amended) A method as set forth in claim 159, including the step of:

including[[,]] in the ~~transactions~~ transmission of the message between the ~~first~~ server and the destination ~~server~~ address via the selected one of the protocol[[s,]] the status of the delivery of the message ~~to~~ at the destination ~~server~~ address from the ~~first~~ server.

Claim 165 (Currently amended) A method as set forth in claim 159, including the step of:

receiving at the ~~first~~ server a delivery status notification relating to the status of the delivery of the message ~~to~~ at the destination ~~server~~ address and the delivery of the message from the destination ~~server~~ address to ~~the~~ a recipient.

Claim 166 (Currently amended) In a method of verifying at a first server a delivery of an electronic message to a destination server for a recipient, the steps at the first server of:

transmitting the electronic message from the first server to the destination server
5 ~~through a transaction between the first server and the destination server~~ via a protocol
selected from the group consisting of an SMTP protocol and an ESMTP protocol,
receiving[[,]] at the first server from the destination server[[,]] the ~~transactions~~
transmission between the first server and the destination server via the selected one of the
protocols, and
10 transmitting from the first server to the sender the message and the ~~transactions~~
transmission between the first server and the destination server ~~in~~ via the selected one of
the protocols.

Claim 167 (Currently amended) In a method as set forth in claim 166, the step
15 of:

transmitting from the first server to the sender ~~a copy of~~ the message at the time of
the ~~transaction~~ completion of the transmission of the message between ~~of~~ the first server
and the destination server ~~in~~ via the selected one of the protocols.

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Claim 168 (Currently amended) In a method as set forth in claim 166, the step of:

~~retaining~~ discarding the message at the first server after the transmission of the message in the selected one of the protocols by the first server to the ~~destination server~~
5 sender.

Claim 169 (Currently amended) In a method as set forth in claim 166, the steps of:

providing at the first server a digital signature of the message, and

10 transmitting the digital signature of the message from the first server to the sender at the time of the transmission of the ~~transaction in the selected one of the protocols~~ message from the first server to the sender.

Claim 170 (Currently amended) In a method as set forth in claim 169, the steps

15 of:

transmitting from the first server to the sender ~~a copy of the message after of the~~ transmission ~~to the sender of the transaction~~ of the message between the first server and the destination server ~~in~~ via the selected one of the protocols, and

releasing the message at the first server after the transmission of the ~~copy of the~~
20 message ~~in~~ via the selected one of the protocols by the first server to the sender.

Claim 171 (Previously amended) In a method as set forth in claim 170, the step of:

transmitting between the first server and the destination server the identity of the sender, the identity and address of the first server and the identity and address of the destination server and the time of the receipt of the message by the first server and the time of the transmission to the first server from the destination server of the identity of the sender, the identity and address of the first server and the identity and address of the destination server.

10 Claim 172 (Previously amended) In a method as set forth in claim 166, the step of:

receiving at the first server from the destination server a delivery status notification indicating the status of the delivery of the message from the first server to the destination server and the time of the transmission of the delivery status notification by the destination server to the first server.

Claim 173 (Currently amended) In a method of verifying at a first server a message received by the first server from a sender and transmitted by the first server to a destination server for a recipient, the steps of:

20 receiving at the first server from the destination server an attachment including ~~transactions~~ transmissions between the first server and the destination server relating to the message from the sender, the ~~transactions~~ transmissions between the first server and

the destination server being provided via a protocol selected from the group consisting of an SMTP protocol and an ESMTP protocol,

transmitting from the first server to the sender the message and the attachment including the ~~transactions~~ transmissions between the first server and the destination

5 server via the selected one of the SMTP protocol and the ESMTP protocol,

transmitting from the sender to the first server the message and the attachment including the ~~transactions~~ transmissions via in the selected one of the SMTP and ESMTP protocols, and

authenticating the message on the basis of the message and the attachment

10 including the ~~transactions transmitted from the sender to the first server~~ transmission via in the selected one of the SMTP and ESMTP protocols.

Claim 174 (Currently amended) In a method as set forth in claim 173, ~~the step of~~ wherein:

15 ~~authenticating the message transmitted from the sender to the first server when the~~
~~comparison is identical~~ the attachment includes transmissions between servers
intermediate, the first server and the destination server.

Claim 175 (Currently amended) In a method as set forth in claim 17[[0]]3, the
20 step of:

removing the message from the first server when the first server transmits to the sender the message and ~~an~~ the attachment including the ~~transactions~~ transmissions

between the first server and the destination server via the selected one of the SMTP protocol and the ESMTP protocol.

Claim 176 (Currently amended) In a method as set forth in claim 173, the steps

5 of:

receiving at the first server from the destination server the ~~indication~~ transmission of the identity of the sender, the identity and address of the first server and the identity and address of the destination server via the protocol selected from the group consisting of the SMTP protocol and the ESMTP protocol, and

10 transmitting from the first server to the sender the identity of the sender, the identity and address of the first server and the identity and address of the destination server at the time of the transmission from the first server to the sender of the message and the ~~transaction~~ transmission between the first server and the destination server via the protocol selected from the group consisting of the SMTP protocol and the ESMTP
15 protocol.

Claim 177 (Currently amended) In a method as set forth in claim 175[[3]], the steps of

providing at the first server [[a]] digital signature[[s]] of the message and the
20 attachment including the ~~transactions~~ transmission between the first server and the destination server relating to the message from the sender, and

transmitting from the first server to the sender the message and the digital signature[[s]] of the message and the attachment ~~including the transactions between the first server and the destination server via the selected one of the SMTP protocol and the ESMTP protocol and the digital signature of the attachment.~~

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Claim 178 (Currently amended) In a method as set forth in claim 173, the steps of:

transmitting from the first server to the sender the identity of the sender, the identity and address of the first server and the identity and address of the destination
10 server at the time that the message and the ~~transactions~~ transmissions between the first server and the destination server are transmitted from the first server to the sender,

transmitting from the sender to the first server the information transmitted from the first server to the sender, and

authenticating the message at the first server on the basis of the information
15 transmitted from the sender to the first server and representing the information previously transmitted from the first server to the sender.

Claim 179 (Currently amended) A method of verifying delivery at a first server of an electronic message to a destination server for a recipient, including the steps of:

20 receiving at the first server an electronic message from a message sender for ~~routing~~ transmission to the destination server,

~~establishing at the first server a communication with the destination server,~~

transmitting the electronic message from the first server ~~the electronic message~~ to the destination server ~~with a protocol transaction~~ via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol,

receiving at the first server the ~~protocol transactions~~ transmissions between the
5 first server and the destination server via the selected one of the SMTP and ESMTP protocols relating to the message, and

transmitting from the first server to the sender the message and at least a particular portion of the ~~protocol transactions~~ transmissions between the first server and the destination server via the selected one of the SMTP and ESMTP protocols.

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Claim 180 (Currently amended) A method as set forth in claim 179 wherein the message and the at least particular portion of the ~~transactions provided~~ transmissions ~~in~~ via the selected one of the SMTP and ESMTP protocols to the sender are provided by the sender to the first server, and wherein

15 the message is authenticated by the first server on the basis of the message and the at least particular portion of the ~~transactions~~ transmissions from the sender to the first server.

Claim 181 (Currently amended) A method as set forth in claim 17[[8]][[9]]
20 wherein

a digital signature is ~~made~~ provided of the message at the first server and wherein

the digital signature is transmitted from the first server to the sender with the message and the at least particular portion of the ~~protocol transactions~~ transmissions between the first server and the destination server and wherein

the digital signature is thereafter provided by the sender to the first server with the message and the at least particular portion of the ~~transactions~~ transmissions ~~in~~ via the selected one of the SMTP and ESMTP protocol[[s]].

Claim 182 (Currently amended) A method as set forth in claim 180 wherein a digital signature of the message and a digital signature of the ~~transactions~~ transmissions provided ~~in~~ via the selected one of the SMTP and ESMTP ~~the selected~~ protocol[[s]] are produced at the first server and are transmitted to the sender with the message and the ~~transactions~~ transmissions provided ~~in~~ via the selected one of the SMTP and ESMTP protocol[[s]] and wherein

the digital signatures and the message and the at least particular portion of the ~~transactions~~ transmissions provided ~~in~~ via the selected one of the SMTP and ESMTP protocol[[s]] to the sender are thereafter provided by the sender to the first server and wherein

digital fingerprints are produced at the first server from the message and the digital signature of the message provided by the sender to the first server and wherein the message is authenticated at the first server by establishing an identity between the digital fingerprints produced at the first server.

Claim 183 (Currently amended) A method of verifying at a first server the delivery of an electronic message from the first server to a destination server for a destination address including the steps of:

receiving at the first server an electronic message from a message sender for

5 ~~routing~~ transmission to the destination server,

transmitting the electronic message from the first server to the destination server
~~the electronic message,~~

receiving at the first server the ~~transactions~~ transmissions between the first server and the destination server via ~~the~~ a protocol selected from the group consisting of the

10 SMTP protocol and the ESMTP protocol,

transmitting from the first server to the sender the message and the ~~transactions~~
transmission between the first server and the destination server ~~in~~ via the selected one of
the protocols,

receiving at the first server from the sender the message[[s]] and the ~~transactions~~
15 transmission between the first server and the destination server ~~in~~ via the selected one of
the protocols, and

authenticating the message at the first server on the basis of the message received
by the first server from the sender and the ~~transactions~~ transmissions received by the first
server from the sender.

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Claim 187 (Currently amended) A method as set forth in claim 163, including the steps of:

transmitting from the sender to the ~~first~~ server the information transmitted from the ~~first~~ server to the sender, and

authenticating the electronic message on the basis of the information transmitted from the sender to the ~~first~~ server ~~representing the transactions between the first server~~
5 ~~and the destination address via the selected protocol.~~

Claim 188 (Currently amended) A method as set forth in claim 163, including the steps of:

providing a digital signature of the message and a digital signature of an
10 attachment including the ~~transactions~~ transmissions between the ~~first~~ server and the destination server via the selected one of the protocol[[s]], and

transmitting the digital signature of the message and the digital signature of the attachment from the ~~first~~ server to the sender at the same time that the message and the attachment are transmitted from the ~~first~~ server to the sender.

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Claim 189 (Currently amended) A method as set forth in claim 172, including the steps of:

generating at the first server a digital signature of the message and a digital signature of the attachment including the ~~transactions transmitted from~~ transmission
20 between the first server and the destination server ~~sender to the first~~ via the selected one of the protocols ~~server~~, and

transmitting from the first server to the sender the message and the attachment and the digital signatures of the message and the attachment.

Claim 190 (Currently amended) A method as set forth in claim 173, including the

5 steps of:

providing a digital signature of the message and a digital signature of the attachment including the ~~transactions~~ transmission between the first server and the destination server via the selected one of the protocol[[s]], and

transmitting the digital signatures from the first server to the sender at the same
10 time as the transmission from the first server to the sender of the message and the attachment including the ~~transactions~~ transmission via the selected one of the protocol[[s]].

Claim 191 (Currently amended) A method as set forth in claim 189, including the

15 steps of:

transmitting from the sender to the first server the message and the digital signature of the message and the attachment and the digital signature of the attachment including the ~~transactions~~ transmissions between the first server and the destination server ~~in~~ via the selected one of the protocols, and

20 authenticating the message on the basis of the digital signatures and the message and the attachment transmitted ~~between~~ from the sender ~~and to~~ to the first server ~~in~~ via the selected one of the protocols.

PLEASE ADD THE FOLLOWING CLAIMS:

Claim 226. (New) In a method of authenticating a message provided by a sender and transmitted to a destination server by a second server displaced from the sender and the destination server, the steps at the second server of:

- 5 providing an attachment transmitted between the second server and the destination server via a selected one of SMTP and ESMTP protocols, and
transmitting the attachment from the second server to the sender.

10 Claim 227. (New) In a method as set forth in claim 226, the steps at the second server of:

providing a digital signature of the attachment at the second server, and
transmitting the digital signature from the second server to the sender at the time of transmitting the attachment from the second server to the sender.

15 Claim 228. (New) In a method as set forth in claim 227, the steps at the second server of:

receiving the attachment and the digital signature at the second server from the sender, and
authenticating the attachment at the second server on the basis of the attachment
20 and the digital signature received by the second server from the sender.

Claim 229. (New) In a method as set forth in claim 227, the steps at the second server of:

receiving the attachment and the digital signature at the second server from the sender,

5 providing at the second server digital fingerprints of the attachment and the digital signature received at the second server from the sender, and
comparing the digital fingerprints to authenticate the attachment.

Claim 230. (New) In a method of authenticating a message provided by a sender
10 and transmitted to a destination server by a second server displaced from the sender and the destination server, the steps at the second server of:

providing an attachment including the identity and address of the sender and the identity and address of the second server and the identity and address of the destination server, and

15 transmitting the attachment from the second server to the sender.

Claim 231. (New) In a method as set forth in claim 230 wherein
the attachment includes the address and identity of intermediate stations receiving
the attachment in the transmission of the message between the second server and the
20 destination server.

Claim 232. (New) In a method as set forth in claim 230, the steps at the second server of:

providing a digital signature of the attachment at the second server, and

transmitting the digital signature from the second server to the sender at the time

5 of transmitting the attachment from the second server to the sender.

Claim 233. (New) In a method as set forth in claim 231, the steps at the second server of:

providing a digital signature of the attachment at the second server, and

10 transmitting the digital signature from the second server to the sender at the time

of transmitting the attachment from the second server to the sender.

Claim 234. (New) In a method as set forth in claim 232, the steps at the second server of:

15 receiving the attachment and the digital signature at the second server from the sender, and

authenticating the attachment at the second server on the basis of the attachment and the digital signature received by the second server from the sender.

Claim 235. (New) In a method as set forth in claim 233, the steps at the second server of:

authenticating the attachment at the second server on the basis of the attachment and the digital signature received by the second server from the sender.

5

Claim 236. (New) In a method as set forth in claim 232, the steps at the second server of:

receiving the attachment and the digital signature at the second server from the sender,

10 providing at the second server digital fingerprints of the attachment and the digital signature received at the second server from the sender, and

comparing the digital fingerprints to authenticate the attachment.

15 Claim 237. (New) In a method as set forth in claim 233, the steps at the second server of:

receiving the attachment and the digital signature at the second server from the sender,

providing at the second server digital fingerprints of the attachment and the digital signature received at the second server from the sender, and

20 comparing the digital fingerprints to authenticate the attachment.

Claim 238 (New) In a method of verifying at a server a delivery of an electronic message to a destination address, the steps of:

transmitting the electronic message between the server and the destination address,

receiving at the server the path of transmission of the message between the server

5 and the destination address, the path including servers between the server and the

destination address, and

transmitting to the sender the message and the path of transmission of the message between the server and the destination or address.

10 Claim 239. (New) In a method as set forth in claim 238 wherein

the server does not retain the message or the path of transmission of the message between the server and the destination address after the server transmits to the sender the message and the path of transmission of the message between the server and the destination address.

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Claim 240. (New) In a method as set forth in claim 238 wherein

the server receives from the sender the message and the path of transmission of the message between the server and the destination address and wherein

the server authenticates the message on the basis of the message, and the

20 path of transmission of the message between the server and the destination address,

received by the server from the sender.

Claim 241. (New) In a method as set forth in claim 240 wherein
the server provides a digital signature of the message and transmits the digital
signature with the message to the sender and wherein

5 the server receives from the sender the message and the digital signature of the
message and wherein

the server provides digital fingerprints of the message and the digital signature and
compares the digital fingerprints to authenticate the message.

Claim 242. (New) In a method as set forth in claim 240 wherein
10 the server provides a digital signature of the path of transmission of the message
between the server and the destination address and transmits the digital signature to the
sender with the path of transmission and wherein

the server receives from the sender the path of transmission and the digital
signature of the path of transmission and wherein

15 the server provides digital fingerprints of the path of transmission and the digital
signature of the path of the transmission and compares the digital fingerprints to
authenticate the message.